

Independent Technical Panel (ITP) Demand Management Measure Topic Suggestion from Water Use Efficiency Community and DWR's Urban Stakeholder Committee (USC)

AB 1420 Text: The department, in consultation with the California Urban Water Conservation Council, shall convene an independent technical panel to provide information and recommendations to the department and the Legislature on new demand management measures, technologies, and approaches.

Number	Topic Name	Summary	Ranking							Commenter	Organization	Additional Information
			1 (Low)	2	3	4	5 (High)	ESSENTIAL	Need More Information			
1	Planning	WUE within State and Local Planning Process and Financing Opportunities								Lisa Maddaus	ITP Member	California Water Plan Current Integrated Water Resources Planning Process Urban Water Management Planning Act Past Propositions & Current Proposition 84 Access to Public Goods Charge Connection to Drought & Supply Reliability
		Influences to water supply planning								Amy Talbot	(RWA) Regional Water Authority - Sacramento / Placer / El Dorado County	- Research other water utility revenue impacts besides water conservation such as climate change/weather pattern variations, economy, population distribution, etc. - Investigate methods of planning for and communicating other impacts to maintain conservation as an integral component to overall water management, not a catch all for explaining revenue loss.
2	Update Regulations	Water Conservation Offset for New Developments								William Granger Chris Dundon	City of Sacramento USC	Consider BMP for new developments, include a water conservation offset. Example: San Luis Obispo
		Regulations to prevent irrigation waste								Peter Estournes	Gardenworks-Inc	Develop regulations to prevent sale of water wasting irrigation devices. For example: sprinklers without check valves or are not pressure compensating.
		Manufacturing standards for showerheads								Joe Berg	USC	Showerheads and indoor residential water use do not have a manufacturing standard
		Update Code Standards								Toby Roy	USC	Water agencies have a GPCD mandate; lets focus on other ways without mandating agencies.
		Federal, State, and Local Codes and Regulations								Lisa Maddaus	ITP Member	- Future Development Outdoor Landscaping Ordinances / Building Codes - Existing Building Retrofits Plumbing Codes / Retrofit on Resale (effective mechanism) Outdoor Landscaping Ordinances - Utility Operations / SB X7-7 – Gallons Per Capita Per Day (GPCD) Reduction Targets Conservation Pricing (California Public Utilities Commission)
3	Reporting / Compliance	Provide both a retailer Guidebook and a Wholesaler Guidebook for UWMPs								Jerry De La Piedra	USC	
		Align water conservation reporting between State, USBR, CUWCC, and other agencies								Amy Talbot	RWA	Single reporting mechanism to reduce reporting requirements of water agencies that clearly defines conservation and efficiency expectations of water agencies and creates one data set for regional and statewide planning purposes. For example, aligning the state's DMMs with the CUWCC foundational BMPs.
		Focus DMM compliance on reducing GPCD; not implementation of specific devices								Elizabeth Lovsted	Eastern Municipal Water Distract (EMWD)	Example: Agencies should encourage the installation of the most efficient indoor plumbing fixtures (cost effective, available, reliable). Focus should not be placed on the implementation of specific devices. Agencies should be able to select from a variety of compliance options such as clothes washers, toilets, aerators, and showerheads.
		Limit UWMP / CUWCC BMP reports to: Agency progress in meeting SBX7-7 targets								Matthew Lyons	Long Beach Water Department	Allow individual water agencies to implement water conservation efforts that produce water savings. Limit water conservation reporting to meeting SBX7-7 conservation targets.
		Improve Water Conservation Reporting								Rita Norton		- Compare conservation targets with actual water conservation - Attribute water savings by respective entity: wholesaler, retailer, or both - Validate DMM reporting with information provided in Urban water Management updates and CUWCC bi-annual updates. - Have agencies provide an estimate of market penetration by area for water conserving devices in households/businesses
		Improve Water Sales Reporting								Rita Norton		- Total water sales by season and customer connection size - Report on the cost ratio of water conservation to actual deliveries - Compare the cost of purchasing water with cost of conserved water broken down by retailer and wholesaler - Provide projected funding for water conservation - Have agencies provide water conservation budgets and an estimate of water savings in the following breakdown: 1) Measures 2) Devices 3) Funding by retailers 4) Funding by wholesaler 5) Customer connection size
4	Water / Energy Nexus	Mimic Energy Sector for Energy Efficiency								Carolyn Schaffer	MWDH2O	Achieve greater energy efficiency by following recommendations made by ACEEE for next generation of energy efficient programs. ( <a href="http://www.aceee.org/research-report/u131">http://www.aceee.org/research-report/u131</a> )
		Water / Energy Nexus								Richard Harris	USC	
		Water-Energy Nexus								Amy Talbot	RWA	Study water in energy production and energy in water production at the regional and local levels. Create possible guidelines for consistency in data collection across regions and localities.
		Water - Energy - Greenhouse Gas								Lisa Maddaus	ITP Member	Climate Action Plans (AB 32) Climate Change Effects on Water Demands California Energy Commission / Local Energy Utilities USBR Recommendations from the Water Energy Efficiency Program (WEEP) <a href="http://www.usbr.gov/lc/socal/reports/weep/Vol1ExecSumm.pdf">http://www.usbr.gov/lc/socal/reports/weep/Vol1ExecSumm.pdf</a>
		Joint Water-Energy Efficiency Programs								Amy Talbot	RWA	Evaluate the utility of funding and administering joint water energy efficiency programs. Solicit and evaluate case studies to show water and energy savings potential. Identify barriers to administering such programs. Is there a way to better leverage energy efficiency funding to include water efficiency measures?

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5	Public Education	Education & Awareness Programs								Lisa Maddaus	ITP Member	Volunteer Labeling Programs (i.e. USEPA WaterSense) DWR & ACWA/CUWCC Current Programs CUWCC MOU Commitments Leverage Social Media
		Implement Public Affairs Program for urban California								Matthew Lyons	Long Beach Water Department	Implement a public affairs program across urban California with frequent (weekly/bi-weekly) messages about proper irrigation. Emphasize turning off irrigation systems during winter months.
		Education								Toby Roy	USC	
6	Water Measurement	Water metering technology and other measuring tools.								Richard Harris	USC	
		Advanced Metering Infrastructure (AMI) BMP								William Granger	City of Sacramento	
		Advanced metering infrastructure (AMI)/Automatic Meter Reading (AMR)								Amy Talbot	RWA	- Research and provide recommendations on AMI technology to overcome barriers to expansion such as non-transferrable procedures and technologies between AMI companies, large start up costs, etc. - Research the use of data produced from AMI systems to better track and promote water conservation.
		Low Flow Meters								Amy Talbot	RWA	Evaluate and identify strategies to reduce water loss from low flow meters. Water moves through meters at such a low flow that it's currently unmeasured and not billed.
		Meter Accuracy at low flows								William Granger	City of Sacramento	Meter accuracy at low flows, especially for 1" meters. I think Utah State study focused on meters less than 1". How many agencies are installing 1" meters because of fire department requirements. How inaccurate are they?
7	Rate Structures	Tiered Rates								Rita Norton		Tiered rates for achieving water use reductions and reductions estimates based on presentation of estimating techniques
		Rate Structures								Toby Roy	USC	Update Code section 370-374. drought surcharges.
		Pricing Opportunities								Lisa Maddaus	ITP Member	AWWA M1 Guidance & CUWCC MOU Commitments
		Conservation Pricing and Financial Sustainability of a water utility								Amy Talbot	RWA	Research practices and guidelines water agencies can follow to achieve both. Research should be a joint effort between managers, finance, and conservation coordinators.
		Require wholesalers to allocate water to incentivize water conservation								Matthew Lyons	Long Beach Water Department	When multiple retail water agencies rely on a single wholesale agency for supplemental supplies, how the wholesale agency allocates supplies in a shortage can have a profound impact on the incentives the retail water agencies have to conserve water.
8	Landscape Water Conservation	Separate landscape water use ( Residential / Non-Residential)								Fiona Sanchez	USC	Separate landscape water use into residential and non-residential.
		Simplify landscape water demand estimating								Dennis Pittenger	UC Cooperative Extension, L.A. County	Replace the theoretic Landscape Coefficient equation and Water Use Classification of Landscape Species (WUCOLS) with research based computations using Simplified Landscape Irrigation Demand Estimation (SLIDE)
		Large Landscape								Lisa Maddaus	ITP Member	Partnerships within the Landscape Industry Reference Landscape Task Force Recommendations / Current Model Landscape Ordinance Implementation
		Landscape Advisory Committee								Peter Estournes	Gardenworks-Inc	Landscape Advisory Groups/Business representation with Water Purveyors
		Develop a DWR / ACWA partnership for rolling out "new norm" for landscape								Joe Berg	USC	
		Distribute resource lists								Peter Estournes	Gardenworks-Inc	Irrigation certification programs participation as resource lists and marketing to end users.
		Landscape Water Conservation								Chris Dundon	Contra Costa Water District (CCWD)	<u>Proposed Ideas:</u> - Lawn to Garden Conversion Rebates - Efficient irrigation Rebates - Water Wise Gardening Education <u>Existing ideas:</u> - Tax turfgrass sales in California - Provide discounts on native and other drought tolerant plants (funded through the turfgrass tax) - DWR provide large state-wide grant program to encourage lawn to garden conversions - DWR sponsor large state-wide education program on water wise gardening.
		Pressure Regulation for Landscape								William Granger	City of Sacramento	
		Incentivize Residential Landscape Water Conservation								Elizabeth Lovsted Ron Merckling	Eastern Municipal Water Distract (EMWD) Casitas MWD	Incentivize water efficient irrigation equipment (nozzles, weather based irrigation controllers, drip), turf buy-back, provide irrigation budgets and watering guidelines, and customer education programs for the design and installation of water efficient landscapes. Focus compliance on a reduction in water use instead of a particular method.
		Program Controllers using Landscape water budgets								Peter Estournes	Gardenworks-Inc	Landscape Water Budgets as the preferred method to program controllers vs. the water audit (Catch Can Test method).
		Perform a study on SMART Controllers								William Granger	City of Sacramento	Smart controllers- in my opinion, the study most often cited understates potential water savings based on smart controllers distribution. Recommend performing a study using multiple controllers, since more are available and more user friendly than earlier versions.
		Irrigation Technology								Earl Coleman	ecoflow.co	Improve large scale commerical water savings using catalytic hydroceramic water conditioning process: 15-25% water savings.
9	Residential Opportunities	Residential Water Conservation								Lisa Maddaus	ITP Member	Indoor / Outdoor Hardware Behavioral Shifts (e.g., landscape plant selection, indoor uses) Overcoming Challenges to Making Change / Specific Research Needs

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10	CII Opportunities	CII Water Conservation								Lisa Maddaus	ITP Member	Connection to LEED and other Partnerships Reference CII Task Force efforts Innovative Technologies Shifts to Best Practices Specific Research Needs
11	Fire Sprinkler	Fire Sprinkler / Fire Suppression Systems								Amy Talbot	RWA	Research optimal storage and pressure/meter standards for fire sprinkler and fire suppression systems. Could this be an effective opportunity to reduce water use?
12	High Pressure Regulators	Rebates for: High Pressure regulators ( > 80 psi)								Ron Merckling	Casitas MWD	Decreasing water pressure on customers' distribution systems will encourage greater water use efficiency without posing additional risk to the overall distribution system.
		Pressure Regulators								Amy Talbot	RWA	Research how pressure regulators (customer side) could reduce water loss, especially in high pressure areas (ex: mostly gravity feed systems) .
		Home water pressure regulators								Joe Berg	USC	Residential pressure regulators frequently fail. Lower background pressure
13	Water Loss	Water Loss Control Programs								Lisa Maddaus	ITP Member	Other state requirements connected to permitting / System Audits / Technologies
		Customer Leak Notification										Set a threshold for customer leaks. Water utilities could be asked to contact customers that repeatedly exceed the threshold.
										Amy Talbot	RWA	The identification of water utility system requirements for system set up would need to be addressed.
		Water Loss								Toby Roy	USC	
14	Recyled Water	Application of on-site, non-potable sources								Sarah Rhodes	SFPUC	Investigate methods for buildings to re-use water more than once before discharging to sewer.
		On site re-use and recycled water.								Fiona Sanchez	USC	Review CII Task Force recommendations. DWR to provide
		Recycled Water / Grey Water / Rainwater Harvesting								Toby Roy / Jerry De La Piedra	USC	Alternative water supply from CII or landscape or indoor use perspective – there are good examples out there. Stormwater, CII Task Force report.
		Reclaimed / Recycled Water								Amy Talbot	RWA	Could reclaimed and recycled water be accounted for as a standalone conservation BMP? What would the implications of this action be?
15	Research Needs	WUE Research Needs								Lisa Maddaus	ITP Member	Summary List of Recommended Future Research Needs Governmental/NGO Organizations Role & Responsibilities - Performance Standards - Mutual benefits (water-energy) Funding Strategies
16	Drought Measures	Drought -specific efforts/restrictions for achieving water use reductions and reductions								Rita Norton		
17	Investor Owned Utility	Amount retailer claims as savings as part of utility sales de-coupling and basis for revenue compensation								Rita Norton		
		CUWCC Potential PBMPs								Fiona Sanchez	USC	( <a href="http://www.cuwcc.org/products/pbmp-reports.aspx">http://www.cuwcc.org/products/pbmp-reports.aspx</a> ) CUWCC Council - Candidates for PBMP Status: Year One: 1) Residential and small commercial weather-based irrigation controllers 2) Pre-rinse spray valves for the food service industry 3) Steam sterilizer retrofits 4) X-ray film processor recycling units Year Two: 1) On-Premise Laundries 2) High-Efficiency Plumbing Fixtures - Toilets and Urinals 3) Submetering of Multi-Family Residential Properties 4) Commercial-Industrial Cooling Water Efficiency Year Three: 1) Residential Dishwashers 2) Vehicle Wash Systems 3) Synthetic Turf 4) Residential Hot Water Distribution
		Grey Water Effective social marketing Survey Results from AWWA										

Comments:												
1		Municipal Recycled Water use should not be addressed by the ITP								Rich Mills	DWR	Recycled Water Use has been addressed by the Recycled Water Task Force and the CII Task Force. There are plenty of laws and policies promoting the use of recycled water. There is a chapter on this in the Water Plan. It would be a poor use of ITP time to devote to this topic. It would also be a drain on my staff monitoring it.
2		Recycled Water doesn't fall under DMM's								Heather Cooley	USC	
3		Don't limit ITP to technical suggestions; i.e., requirements for offsets in new developments.								Matt Lyons		
4		Cost effectiveness should be kept in mind when ITP makes recommendations so as to avoid adverse affects on water agencies								Matt Lyons		
5		Look outside the United States for cutting edge water conservation								Heather Cooley	USC	